**Practice with Proportions**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

 **Proportion:** A proportion is an equation that states two ratios are equal.

**Directions**: Solve each proportion to determine the value of the variable. **Some ratios may need to be simplified first, before you can solve the proportion to find the missing value.**

1. $\frac{2 }{3}$ = $\frac{14}{y}$ *y* = \_\_\_\_\_\_ 5.) $\frac{x}{15}$ = $\frac{3 }{5}$ *x* = \_\_\_\_
2. $ \frac{10 }{40}$ = $\frac{x}{4}$ *x* = \_\_\_\_\_\_ 6.) $\frac{c}{6}$ = $\frac{22}{44}$ *c* = \_\_\_\_
3. $ \frac{j }{2}$ = $\frac{25}{10}$ *j* = \_\_\_\_\_\_\_ 7.) $\frac{84}{d}$ = $\frac{28 }{24}$ *d* = \_\_\_\_
4. $ \frac{15 }{45}$ = $\frac{9}{s}$ *s* = \_\_\_\_\_\_\_ 8.) $\frac{40}{r}$ = $\frac{16 }{2}$ *r* = \_\_\_\_

**Directions**: Set up a proportion to solve the following word problems. Be sure to set up ratios with words, show all work, and label your final answers!

9.) The ratio of bananas to peaches in a fruit basket is 4 to 11. If there are 20 bananas, how many peaches are in the basket?

10.)The ratio of dogs to birds in the park is 20 to 18. If there are 30 dogs, how many birds are at the park?

11.) There are 13 chocolate donuts for every 4 glazed donuts at the bakery. If there are 112 glazed donuts, how many chocolate donuts are at the bakery?

12.) Youth soccer teams have 3 coaches for every 22 players. How many coaches will be needed for 110 players?

13.) A glacier moves 2 inches in 8 hours. How far will it move in 20 hours?

14.) Strawberry frozen yogurt has 65 calories in 2 ounces. How many calories are in 10 ounces?

15.) Jayanna bought 8 kiwi fruit for $18. How many kiwis can Jayanna buy if she has $45?

16.) A car can travel approximately 306 miles on 18 gallons of gas. At this rate, how many miles can it travel on 90 gallons of gas?

17.) Tina bought 8 of the same books to give as gift. She spent $32.00. What is the price for one book?

18.) Billy bought 3 packages of strawberries for $6 at Costco. What did he pay for 5 packs of strawberries?